## IV. ESTIMATED COSTS

The estimated costs, based on 2012 prices, are as follows:

	Alternative 2	Alternative 3 Preferred	
Structure	\$ 756,000	\$ 756,000	
Roadway Approaches	\$ 1,418,000	\$ 484,000	
Structure Removal	\$ 85,000	\$ 85,000	
Misc. & Mob.	\$ 341,000	\$ 235,000	
Eng. & Contingencies	\$ 400,000	\$ 240,000	
Total Construction Cost	\$ 3,000,000	\$ 1,800,000	
Right-of-way Costs	\$ 360,000	\$ 380,000	
Right-of-way Utility Costs	\$ 631,000	\$ 110,000	
Total Project Cost	\$ 3,991,000	\$ 2,290,000	

## V. NATURAL ENVIRONMENT

## **Physical Characteristics**

## **Water Resources**

Water resources in the study area are part of the Yadkin river basin [United States Geological Survey (USGS) Hydrologic Unit Code 03040103]. Two streams were identified in the study area (Table 1). The physical characteristics of these streams are provided in Table 2.

Table 1. Water resources in the project study area.

Stream Name	Map ID	DWQ Index Number	<b>Best Usage Classification</b>
Muddy Creek	Muddy Creek	12-94-(0.5)	С
UT to Muddy Creek	SA	12-94-(0.5)	C

Table 2. Physical characteristics of water resources in the project study area.

	Bank	Bankful	Water	Channel		
Map ID	Height (ft)	Width (ft)	Depth (ft)	Substrate	Flow	Clarity
Muddy	10-15	30-40	1-3	Sand, silt,	Moderate	High
Creek	10-13	30-40	1-3	boulders		
SA	1-2	1	0	Sand, silt	None	N/A

There are no designated Primary Nursery Areas or anadromous fish waters present in the project study area. Neither Water Supplies (WS-I: undeveloped watersheds or WS-II: